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INTRODUCTION

Electronic technology has greatly expanded the methods of creating, editing, maintaining, transmitting and retrieving information. Much of this electronic information is a record because it is used in state agencies to make decisions or affects citizens; therefore, it must be managed as a record. Though electronic information processing systems contain very important information, they do not perform electronic recordskeeping functions.

Electronic recordskeeping systems provide the functionality needed to enable California State government agencies and their records managers to adhere to certain standards and guidelines established by California statutes and regulations (i.e., the "State Records Management Act" under Sections 14740-14774 of the California Government Code; the State Administrative Manual, Chapter 1600, "Records Management;" and the "Specifications for Electronic Records Management Software"). That functionality, discussed in detail in the section on Electronic Recordskeeping, is based upon the need to effectively manage and control the record lifecycle and all documents constituting the record, regardless of format. Further, controlling the lifecycle of records requires knowledge of the retention assigned to the record or its components.

Records may now be found on a variety of media from creation to final disposition, making the task of properly accounting for the official record increasingly complicated. Therefore any approach to the management of records must incorporate accepted standards of functionality to adequately preserve the "official" record as certifiably authentic. The issue involving the authenticity of electronic records has, through the eighties and nineties, primarily revolved around the capability of the media to restrict changes in the original document. Now in the 21st Century, this has been greatly expanded to the more proper question concerning the document attributes and the overall system integrity to preserve and validate the record as authentic.

Electronic Information Processing System versus Electronic Recordskeeping System

It is important to distinguish the difference between an *"electronic information processing system"* and an *"electronic recordskeeping system."* An example of an electronic information processing system would be an e-mail messaging system, whereas an electronic recordskeeping system is designed to not only manage e-mail reception, creation, identification, storage, accessibility, and integrity of the e-mail as records, but also the disposition of that e-mail through an electronically integrated records retention schedule. Many products claim to perform electronic records management or integrated document management, but they are not true electronic recordskeeping systems unless they meet the DGS "Specifications for Electronic Records Management Software."

Records management systems and methodologies must incorporate any appropriate documents into the records management plan. While some agencies may be unable to efficiently manage all aspects of the record immediately (e.g., e-mail), the records management plan should provide for a methodology and a schedule for achieving this vital goal.

Records Management Practices - General

In order to apply these practices to electronic information, you must first determine, as you would in the case of information preserved on paper, which electronic information is a "record" and which is a "non-record." As a result answering the question "what is a record?" becomes a pivotal step in determining which information should be a records management concern.

The glossary in this publication defines a record as: "all paper, maps, exhibits, magnetic or paper tapes, photographic films and prints, and other documents produced, received, owned or used by an agency, regardless of media, physical form or characteristics." Additional definitions are available in the glossary under PUBLIC RECORDS and STATE RECORDS.

You may consider the following records management guidelines:

- E-mail is a document created and transmitted as electronic information within an electronic communication medium. An e-mail message and associated information (metadata), is a document. It is also a record if it meets the recordskeeping criteria established within an organizations records management plan. That is, the fact that e-mail is the organization's property renders it subject to management under the records management plan, regardless of media.

- Voice mail is usually a non-record, unless preserved in a manner that would meet record criteria, as with other records, such as containing information necessary for that organization's business. Depending upon your requirements, you may consider managing a voice mail as a computer file, as voice communications and computer functionality continue to merge.

- Word processing files are records if they meet the criteria to be a record.

- One set of computer data containing accounting and tax information plus one copy of the visible output (e.g., printed report of computer output microfilm) are records under the Internal Revenue Service's Revenue Procedure 91-59.

- Computer back-up tapes and other duplicate computer files are non-records.

- Databases and other data compilations that are used for multiple purposes are often records. This is especially true when they are referred to by a record document that requires the information for understanding a stated policy, decision, etc.

- Electronic transactions are records.

Implementation of records management practices will depend on the needs of the organization.

When electronic information is deemed to meet the criteria of a "record," it must be managed according to sound records management practices and retained according to each organization's records retention schedule.

Electronic information that is deemed to be a "non-record" can be destroyed at the discretion of the user--generally, after a transitory period or after the official record is produced.

KEY DEFINITIONS

Electronic Record

Electronic records are informational or data files that are created and stored in digitized form through the use of computers and applications software. They are stored on various magnetic and optical storage devices and are products of computers and computer software. The format of an electronic document does not change the fact that it is a record, but its electronic form and its dependence on machines for creation and reference do change the way these records must be stored and managed.

As stated later in this handbook, the Uniform Electronic Transaction Act (UETA) defines electronic records as *"a record created, generated, sent, communicated, received, or stored by electronic means."* The UETA is an excellent reference to use as a guide when working with electronic records and covers the full spectrum of usage in electronic signatures relating to transactions. See Appendix 10 - Overview of the Uniform Electronic Transaction Act.

Usually, the definition applies to all electronic records systems, whether in microcomputers, minicomputers, or mainframe computers, regardless of storage media, in networked or stand-alone systems, including small computers, such as memory typewriters, calculators, and embedded systems. Examples include records stored on a server, or on magnetic media, such as tapes, disk packs, compact disks, or optical disks.

Electronic Records Management

Electronic records management, while involving special considerations, requires the planning, budgeting, organizing, directing, training, and controlling activities associated with managing the record in its entirety.

Electronic Recordskeeping

Electronic recordskeeping is the use of records management principles for records maintained electronically. This term is sometimes confused with "electronic recordskeeping system" which is described below.

Electronic Recordskeeping System (ERS)

An Electronic Recordskeeping System is primarily a software-based methodology used by an organization to manage all its records, regardless of format, over the entire record's lifecycle. Primary recordskeeping functions must include categorizing, locating, identifying and controlling record disposition requirements, including management of the storage, retrieval, and disposition of the records; regardless of the repository. This type of software includes the capabilities of both Integrated Document Management System (IDMS) and Records Information Management (RIM) software.

NOTE: Appendix 1 of this Handbook includes definitions of additional terms related to the management of electronic records. Throughout this Handbook the term "record" is used generally, unlike the specific computer science usage referring to a group of related data fields.

ELECTRONIC RECORDSKEEPING SYSTEMS AND PROGRAM REQUIREMENTS

All recordskeeping systems, whether paper, microform, or electronically based, should be cost effective, easy to use, provide the required information when needed, and retain the records for the required length of time.

Electronic recordskeeping systems are more vulnerable to undetected alteration, loss or unauthorized disclosure of information, than are hard copy or microform systems. This vulnerability suggests the need for comprehensive and detailed planning before electronic recordskeeping systems are implemented.

In addition, the maintenance of electronic records requires the careful management of procedures and equipment to ensure the continuing accuracy and availability of the records. Use of electronic recordskeeping system software requires careful application of sound records management principles.

The Records Management Program Includes the Management of Electronic Records

State law requires the head of each state agency to ensure that a program for the management of electronic records is established which incorporates the necessary program elements, details are discussed below:

Program Elements

The program elements for managing electronic records are:

- Assigning the responsibility to develop and implement an agency-wide program for the management of all records, including electronic records.

- Integrating the management of electronic records with other records and information technology needs of the agency.

- Incorporating electronic records management objectives, responsibilities, and authorities in agency directives and/or guidelines and disseminating them throughout the agency as appropriate.

- Addressing records management requirements before approving new electronic records systems or enhancements to existing systems.

- Providing adequate training for users of electronic records systems in the operation, care, and handling of the equipment, software, and media used in the system and in the management of electronic records.

- Developing and maintaining up-to-date information about all electronic records systems.

- Inventorying of agency records including all electronic records, and keeping this inventory updated.

- Identifying and protecting vital records, selecting appropriate media and appraising agency records to develop the agency records retention schedule.

- Securing approval of the records retention schedule and ensuring its implementation for use in the management and disposition of records.

Management Responsibility

Although stated in other State of California Records Management Program directives, it is still important to note that each agency is required to have a Records Management Analyst and/or Manager (and an assistant or back-up). In keeping with California State law, the appointment is made by the head of the agency, in writing. Announcement of this appointment should be disseminated throughout the agency so all are aware of this individual's position, role and responsibility regarding the agency-wide records management program.

This trained and knowledgeable person acts as a liaison for the State's Records Management Program, the California State Archives, and the respective agency. Their role is to manage and/or coordinate the records activity of the agency. The main functions involved and supported by state agency's "Executive Management" in this critical responsibility are listed here and discussed in detail in this Handbook.

The agency Records Management Analyst and/or Manager:

- Administers the records management program within the agency.
- Conducts or oversees the inventory of all agency records as required.
- Conducts or oversees the preparation and maintenance of the agency records retention schedule program.
- Ensures adherence to the agency records retention schedules.
- Approves all documentation for transfer of records to the State Records Center and the California State Archives.
- Originates and/or approves all requests to dispose of state records or to transfer records to the California State Archives as designated by an approved records retention schedule.
- Attends training and information classes offered by the Records Management Program.
- Distributes the training schedule and registration information and/or conducts training for the Records Management Program classes to agency staff.

The effective discharging of the above responsibilities and functions of the agency are critical to ensure statutory compliance. It ensures that the agency establishes and maintains an active, continuing program for the economical and efficient management of all records and information collection practices, regardless of the media.

INFORMATION TECHNOLOGY AND RECORDSKEEPING PRINCIPLES

The Department of Information Technology (DOIT)

“Information technology” in California State government gained national attention and prominence when the legislature passed landmark legislation, which the Governor signed into law in October 1995, creating the Department of Information Technology (DOIT). DOIT was charged with providing leadership, guidance, and oversight to ensure successful delivery of information technology and to enhance delivery of California State government services.

The law gave DOIT the authority to provide guidance to state agencies regarding acquisition management and appropriate use of information technology. DOIT also provides guidance to all state entities to ensure that the agency’s information technology direction is consistent with the agency’s mission, business plan, and has a result-oriented management policy; that promotes reforms in information technology personnel classification. DOIT also ensures that the agency has systems and procedures that reward skill in meeting business needs and facilitation of change with effective application of information technology.

Understanding Information Technology

"Information technology" means all computerized and automated information handling, including systems design and analysis, conversion of data, computer programming, information storage and retrieval, voice, video and data communications, system controls, simulation, and all related interactions between people and machines.

Management of information technology is the proven planning, budgeting, organizing, directing, training, evaluating and other control activities associated with information technology applications. This includes procedures, equipment, and software that are designed, built, operated, and maintained to collect, record, process, store, retrieve, display, and transmit information. This would also include associated personnel, consultants and contractors.

The Relationship of Information Technology to Records Management

Information technology must be managed as an important asset. Consistent with this principle, information technology is an indispensable tool of modern government that each state agency is expected to use and seek opportunities that will increase the quality of the services it provides and to reduce the overall costs of government.

Records management in California State government on the other hand provides the procedural infrastructure that ensures information is available, preserved, and when appropriate, destroyed. Records management evaluates information in all media based on legal, regulatory, operational and historic factors. By recognizing that all information is not equal, the records and information management program assigns cradle-to-grave handling instructions that include who keeps what, for how long, at what location (including cyberspace), in what form and format.

Records management programs demonstrate a systematic approach and provide the formality that is favored by the courts. Just as important, records management evaluates categories of information assets. Items with long-term reference value should remain accessible (and legible) for the duration.

More than media longevity, the issue is technology obsolescence: What operating system version will be used 10 years from now? Will it provide a means to glean the knowledge and insights found in reports created today? Or will today's electronic files be tomorrow's punch cards? Records management's dictum of *"the right information, at the right time, to the right people, in the right form"* attests to the long-term view.

This is the essential difference between records management and information technology. While dense storage at declining costs seem to encourage keeping everything forever, prudent records management counsels that the enterprise keep only what is required, and assure that any new system has mechanisms in place to purge the superfluous when it is time.

Finally, in California State government, the agency Records Management Manager is usually not the same person named as the agency Chief Information Officer and/or the systems technology manager. They must, however work together to coordinate and ensure that records management provides the procedural infrastructure that ensures information is available, preserved and, when appropriate, destroyed, and that electronic recordskeeping requirements are met.

AGENCY DIRECTIVES

Incorporating Electronic Records Management

Managers and staff must be aware of their recordskeeping responsibilities. Managers of state programs utilizing electronic records have the responsibility for instructing employees in the creation, use and disposition of electronic records and for ensuring that such procedures are followed and reflected in appropriate directives.

Some organizations permit each user of electronic equipment to operate independently with no established policies or standardized procedures. This tendency has fewer serious consequences in small organizations, but in larger operations this will result in chaos.

Procedures are necessary because valuable records can be lost, changed, or destroyed; and the electronic recording medium can be inadvertently erased or overwritten. Along with these hazards, there is the distinct possibility of unauthorized access to sensitive or confidential information in electronic files.

Individuals using electronic recordskeeping equipment to create, retrieve, edit, store, transmit, and dispose of electronic records are responsible for correctly using the equipment, managing the records according to prescribed procedures, and seeking assistance whenever they have questions concerning the management of electronic records.

THE RECORDS MANAGEMENT REVIEW & PLAN

Review and Evaluation of Requirements

Before approving any electronic recordskeeping system or information processing system, the Records Management Analyst and/or Manager, information systems and technology managers and other agency managers should evaluate how effectively and efficiently information is stored and retrieved using present equipment, networks, and software. They should study future requirements and recommend new systems as appropriate. Certain factors should be considered before upgrading or implementing new systems. These factors are practicality, the cost, and the effectiveness of new configurations.

The Records Management Plan

Most important, is the development of a Records Management Plan. This plan should be sufficiently detailed so as to provide a thorough file classification scheme for the entire organization. The classification scheme should anticipate supporting the possible employment of an electronic recordskeeping system that can incorporate the classification scheme as the core of its recordskeeping management functions. That is, all activities relate to the classification scheme which, in turn, ensures proper final disposition. Finally, the Records Management Plan must be incorporated into the organization's strategic and disaster recovery plans.

The Records Management Program provides general consulting in a broad range of topics involving records and workflow studies, Feasibility Study Reports (FSR), records conversion (microform and electronic), and the implementation of electronic recordskeeping and office automation.

NOTE: See Appendix 3, "Checklist of Pre-Purchase Considerations and Reviews for Electronic Records Systems" in the Appendices section of the Handbook for general questions to be examined during the review process, including the DGS "Specifications for Electronic Records Management Software."

TRAINING

Providing adequate training for users of electronic recordskeeping systems in the operation, care, and handling of the equipment, software, and media used in the system and in the management of electronic records is the responsibility of the agency records manager and the State's Records Management Program.

Training for individuals who create, edit, store, retrieve or dispose of records is an important aspect of electronic records management. Training enables agency personnel to identify records, and to understand how records are filed in an electronic recordskeeping system, how records are safeguarded, what procedures are used to edit records, and how records should be disposed of according to legal requirements. Methods of providing training for the management of electronic records include one or more of the following:

- Contact the State's Records Management Program for scheduled classes. Formal classroom training is presented several times a year on a recurring basis or as needed for special situations.

- A self-learning center within the agency, where operators can teach themselves at their own rate of learning through interactive programs. As a rule, commercial tutorial programs do not include records management information. Consequently, records management concepts should be developed and offered by the agency.

- Telephone "hotlines" or "help desk" staffed by knowledgeable computer support professionals, who can answer technical questions and provide "quick fix "solutions. This process may not be an adequate learning tool for good records management unless the computer support professionals have received specialized records management training.

- Attend specialized training offered by ARMA, AIIM and other professional organizations.

- Training offered by the manufacturer or supplier. This usually covers the operation of the equipment, but does not normally include the principles of records management.

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